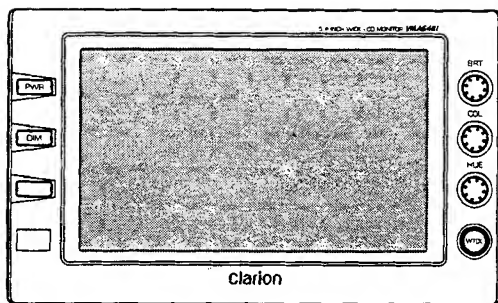


Clarion

5.8" WIDE LCD MONITOR

VMA6481

Owner's manual & Installation manual



Thank you for purchasing the Clarion VMA6481.

- * Please read this Owner's manual & Installation manual in its entirety before proceeding with wire connection and installation.
- * After reading this manual, be sure to keep it in a handy place (e.g., glove compartment). If you sell the motor vehicle, please leave the manual in it so that the new owner can use it.
- * Read the contents of the enclosed warranty card and keep it with this manual.

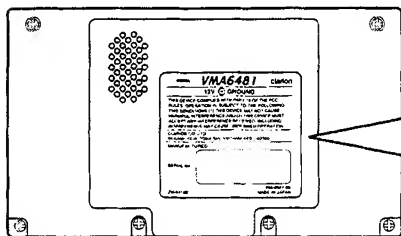
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1. PRECAUTIONS

1. This set is for use in DC 12V, negative ground vehicles. Be sure to consult your store of purchase or a Clarion-designated service outlet before installing it on DC 24V cars.
2. Do not operate the set in ways other than described in this guide. Doing so may damage it.
3. **Safety first! For rear seat use only. Do not install on dashboard or anywhere else that would permit monitor to be viewed by the driver.** Monitor must not be located in the motor vehicle at any point forward of the back of the front seats. Monitor must never be used in any manner that will distract driver or interfere with driver's safe operation of the motor vehicle.
4. Be careful not to run down the car battery while using the set with the car stopped.
5. For safety, install the set in a position at which it cannot be seen by the driver.
6. Do not disassemble or modify the set. Doing so may damage it.
7. Keep drinks and drops from umbrellas away from the set. Water may damage the internal circuitry.
8. Do not let lit cigarettes or other hot objects touch the set. Doing so may damage or deform the cabinet.
9. Do not let the set become hot. If the temperature in the car is high or if the set has been exposed to direct sunlight and is hot, lower the temperature before using it.
(The liquid crystal panel will work properly within a temperature range of 0 to 60 °C.)
10. In extremely cold temperatures, the movement of the picture may be slow and the picture may be dark, but this is not a malfunction. The set will work normally once the temperature increases.
11. Small black and shiny dots inside the liquid crystal panel are normal for liquid crystal products.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced radio/TV technician for help.



| | | |
|--|---|---------|
| MODEL | VMA6481 | clarion |
| 12V \ominus GROUND | | |
| THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE MAY CAUSE UNDESIRABLE OPERATION. | | |
| CLARION CO., LTD. 50 KAMITODA, TODA-SHI, SAITAMA-KEN, JAPAN. | | |
| MANUFACTURED: | | |
| SERIAL No. | <div style="border: 1px solid black; height: 40px; width: 100%;"></div> | |
| ZM-6110B | 286-9021-00 MADE IN JAPAN | |

!

USE OF CONTROLS, ADJUSTMENTS, OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN, MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. THE COLOR LCD MONITOR SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

INFORMATION FOR USERS:

CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANUFACTURER WILL VOID THE WARRANTY AND WILL VIOLATE FCC APPROVAL.

⚠ WARNING

MONITOR AND TUNER MUST BE INSTALLED AND USED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE VEHICLE OR THE MONITOR, MAY RESULT IN AN ACCIDENT, AND MAY VIOLATE THE LAW. CLARION DISCLAIMS ANY LIABILITY FOR ANY DAMAGES THAT MAY RESULT FROM A FAILURE TO INSTALL AND USE THIS UNIT AS STATED IN THESE INSTRUCTIONS.

2. FEATURE

● **5.8" wide-screen color LCD panel**

The 5.8" TFT active matrix color LCD panel delivers striking images.

● **Bright, clear screen**

The color LCD panel has 280,800 pixels for superior image resolution.

● **Switchable screen size**

The display can be switched between three screen sizes: normal, full-wide, and cinema.

● **Video input terminal**

The display can be used to enjoy video images even if no TV tuner is connected.

3. CAUTION ON HANDLING

For a longer service life, be sure to read the following cautions.

- Don't allow any liquids on the set from drinks, umbrellas etc. Doing so may damage the internal circuitry.
- Do not disassemble or modify the set in any way. Doing so may result in damage.
- Do not let cigarettes burn the display. Doing so may damage or deform the cabinet.
- If a problem should occur, have the set inspected at your store of purchase.
- Do not hold on the LCD panel when adjusting the angle of the LCD panel. Doing so may damage it.

Cleaning

• **Cleaning the cabinet**

Use a soft, dry cloth and gently wipe off the dirt.

For tough dirt, apply some neutral detergent diluted in water to a soft cloth, wipe off the dirt gently, then wipe again with a dry cloth.

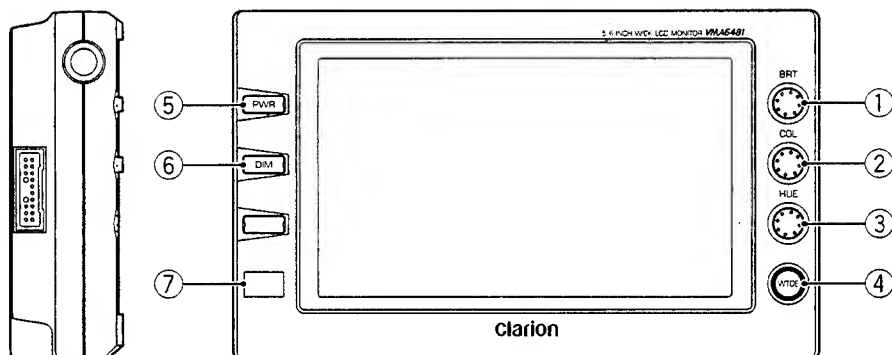
Do not use benzene, thinner, car cleaner, etc., as these substances may damage the cabinet or cause the paint to peel. Also, leaving rubber of plastic products in contact with the cabinet for long periods of time may cause stains.

• **Cleaning the LCD panel**

The LCD panel tends to collect dust, so wipe it off occasionally with a soft and dry cloth.

The surface is easily scratched, so do not rub it with hard objects.

4. NAME OF PARTS



① BRIGHT control (BRT)

Turn this control to adjust the brightness of the screen.

② COLOR control (COL)

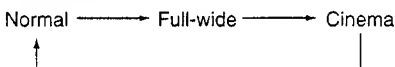
Turn this control to adjust the color density of the screen.

③ HUE control (HUE)

Turn this control to adjust the hue of the screen.

④ WIDE (screen size selector switch) button

Each time this button is pressed, the screen size setting changes as indicated in the sequence below.



⑤ POWER switch (PWR)

⑥ DIMMER switch (DIM)

Press this to change the brightness of the back light.

⑦ Remote control sensor

The separately sold remote control unit (RCB-062-600) can be used when the Clarion expansion TV tuner is connected to an FM modulator and a deck.

Selecting the screen size

Three screen display-modes are supported:
normal, full wide and cinema.

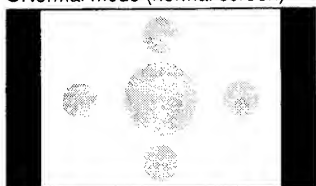
Note:

- When the full wide mode is used to display a normal 4:3 picture which is not a wide picture so that it fills the whole wide TV screen, parts of the picture around the edges will be off the screen or the picture will be distorted on the screen. To view original pictures so as to respect the intentions of the producer, use the normal mode.

■ For normal 4:3 picture reception

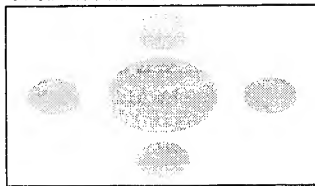
Depending on which mode is set, the shape of the picture will be distorted on the screen.

● Normal mode (normal screen)



Black bands appear to the left and right of the screen.

● Full wide mode



The whole picture is stretched in the sideways direction.

● Cinema mode



The picture at the top and bottom of the screen is off the screen.

■ For wide (16:9) picture reception

Use the cinema mode.

● Normal mode



Black bands appear all around the screen.

→ (Full wide mode) →

● Cinema mode



The picture is shown expanded so that it fills the whole screen.

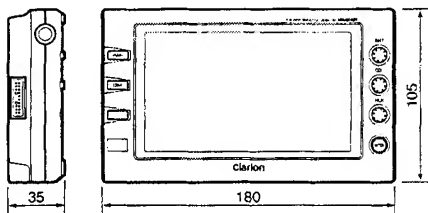
5. TROUBLESHOOTING

| Symptom | Cause | Measure |
|---|---|--|
| Power does not switch on. | The fuse has blown. | Replace the fuse with one of the same rating (3 A for this unit). If the fuse blows again, contact the store where you purchased the unit. |
| | Wiring is incomplete. | See "Installation/Wire Connection Guide (especially, Section 5 . Wire Connections)" of this manual and connect properly. |
| Picture does not appear. | TV tuner is not set to TV mode (when using TTX7101). | Set the function to "TV mode." |
| | TV tuner is set to VTR mode (when using TTX7101). | In the VTR mode, no picture appears if no video signal is being input to the VIDEO IN terminal of the tuner. |
| Picture has shadow or shadows. | Signal condition is poor. | This may be due to signals reflected off mountains or buildings. Check again in a different place and direction. |
| Screen is dark. | Brightness is adjusted too low. | Check that the brightness is properly adjusted in the BRIGHT control ① and set it properly. |
| | Usage conditions are poor. | This may happen if the temperature in the car is below 32°F (0°C) or above 140°F (60°C). Check again when the temperature is between 32°F (0°C) to 140°F (60°C). |
| | The dimmer switch has been depressed. | Press the dimmer switch again to disengage it. |
| The power was turned off when driving on bumpy roads. | Severe vibration to the operation panel activated the DCP's sensor. | Press the POWER button ⑤ again to turn the power on. |
| Colors are pale or hue is poor. | COLOR (tone of color) and HUE are not adjusted appropriately. | Adjust the color and hue density using the COLOR and HUE controls. |
| Spots or stripes on picture | Interference signals | This may be caused by interference from other cars, trains, high voltage lines, neon lights, etc. Check again in another place. |

6. SPECIFICATIONS

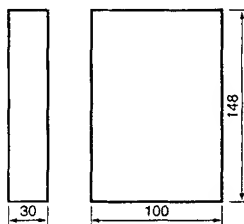
LCD monitor

Screen size: 5.8 inches
(127 mm width × 72 mm height)
Display method: Transparent type TN liquid crystal display panel
Drive method: TFT (thin-film transistor) active matrix drive
Pixels: 280,800 (1,200 × 234)
Video input: Composite NTSC signal - TYP 1.0 Vp-p (75Ω)
Weight: Approx. 400 g
External dimensions:
180 (W) × 105 (H) × 35 (D) mm



Connector converter unit

Power supply voltage: DC 13.2 V
(10.8 V - 15.6 V)
Ground type: Negative ground
Current consumption: 1.0 A or less
(with monitor connected)
Weight: 480 g
External dimensions:
100 (W) × 30 (H) × 148 (D) mm



* The specifications and design are subject to change without notice due to product improvements.

Clarion

VMA6481

Installation/Wire Connection Guide

■ Contents

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⚠ WARNING

MONITOR AND TUNER MUST BE INSTALLED AND USED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE VEHICLE OR THE MONITOR, MAY RESULT IN AN ACCIDENT, AND MAY VIOLATE THE LAW. CLARION DISCLAIMS ANY LIABILITY FOR ANY DAMAGES THAT MAY RESULT FROM A FAILURE TO INSTALL AND USE THIS UNIT AS STATED IN THESE INSTRUCTIONS.

1. BEFORE STARTING

1. This set is exclusively for use in cars with a negative ground 12 V power supply.
2. Read these instructions carefully.
3. Be sure to disconnect the battery "⊖" terminal before starting. This is to prevent short circuits during installation. (Figure 1)

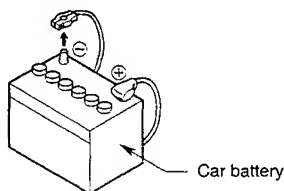


Figure 1

2. PACKAGE CONTENTS

| | | |
|--|--------------------------------------|---|
| ① Monitor | Drop prevention stay | 1 |
| ② Connector converter unit | (Attach if necessary.) | |
| ③ Manuals | Fixing screws | 7 |
| Owner's Guide and Installation Manual | Clamps | 3 |
| Warranty card | ⑦ Cleaner | 1 |
| ④ Connection lead (monitor ↔ converter unit) | ⑧ Accessory bag (for converter unit) | |
| ⑤ Power cord (for converter unit) | Mounting brackets | 2 |
| ⑥ Hardware for monitor stand | Plastic blind clips | 4 |
| Metal fitting | Mounting screws (M4X8) | 4 |
| Height adjustment bracket | Hooks | 2 |
| 1 | | |

3. INSTALLATION

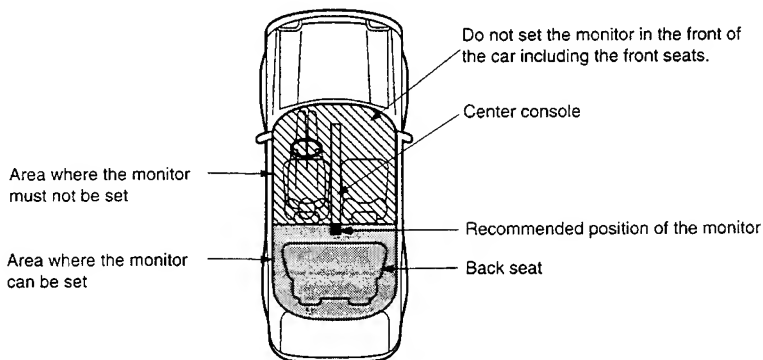
FOR REAR SEAT USE ONLY. DO NOT INSTALL ON DASHBOARD OR ANYWHERE ELSE THAT WOULD PERMIT MONITOR TO BE VIEWED BY THE DRIVER. MONITOR MUST NOT BE LOCATED IN THE MOTOR VEHICLE AT ANY POINT FORWARD OF THE BACK OF THE FRONT SEATS. MONITOR MUST NOT BE INSTALLED IN A LOCATION OR IN A MANNER WHICH COULD DISTRACT DRIVER OR INTERFERE WITH DRIVER'S SAFE OPERATION OF THE MOTOR VEHICLE.

Notes:

- Be sure to install the monitor securely using the included stand or a separately sold stand.
 - For safety, the driver should not watch TV or videos while driving.
1. This monitor is exclusively for viewing from the back seat of a car. Decide on the position in which the monitor is to be set behind the front seats so that its screen can be clearly seen from the back seat. (For example, position the monitor on the back side of the center console behind the front seats as shown in the figure below.) The monitor screen should always face the back seat so that the driver can not see it.

Notes:

- Do not under any circumstances set the monitor on the side of or in front of the front seats where it will come into the driver's range of vision.
- The monitor screen should always face the back seat and must not face the driver's seat.

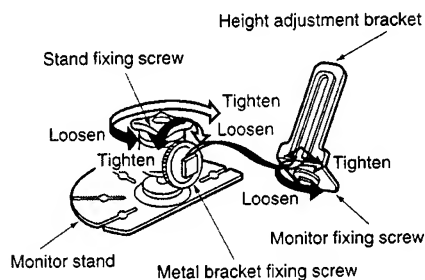


Note:

Note that depending on the material of position of installation, the adhesive strength may be weak or the surface may be damaged when the stand is removed.

■ Mounting the stand

1. Mount the height adjustment bracket on the monitor stand.

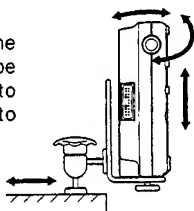


2. Temporarily attach the monitor to the height adjustment bracket and determine the mounting position.

(Do not remove the protective paper from the double-sided tape at this point.)

Important

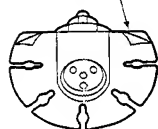
Bend the portion of the monitor stand that will be stuck to the dash to match the surface to which it will be stuck.



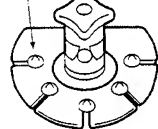
3. Remove the monitor from the stand for the time being. Remove the protective paper from the back of the metal fitting and stick it to the dash. Use screws to secure it firmly in place.

(Make sure to wipe thoroughly with cleaner the area where the metal fitting is to be mounted and to dry it thoroughly beforehand. Push firmly when mounting the metal fitting so that it sticks firmly.)

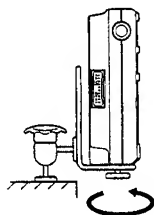
Remove protective paper from back.



Secure with screws (5 places).



4. After 24 hours have passed; mount the monitor on the height adjustment bracket.



■ Removal

- Beginning from the corner of the surface to which the fitting is stuck, slowly lift it off.

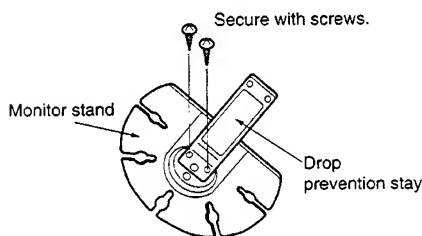
(If it is cold, turn on the car heater or use a hairdryer to warm the surface to which the fitting is stuck.)

- If any adhesive tape remains, rub it off with your fingers.

※Drop prevention stay

The drop prevention stay may be used if needed based on the stand mounting location.

- **Mounting the drop prevention stay**
Remove the screws from the base of the stand and use them to mount the drop prevention stay.



■ Installing the Connector Converter Unit

Before installing the connector converter unit, position it considering safety and operability of the entire system.

Sample installation (when the unit is installed under the front seats)

Install the unit under the front seats using the included parts. If there are not enough space under the seats, consult the store where you purchased the unit.

1. Attach the mounting brackets on the left and right side of the connector converter unit using the attached screws (M4×8). (Figure 2)
2. Position the connector converter unit on the floor carpet and drill holes through the carpet at the position where the holes of the bracket fit.
3. Push the attached plastic blind clips through the holes on the carpet into the mounting bracket holes.

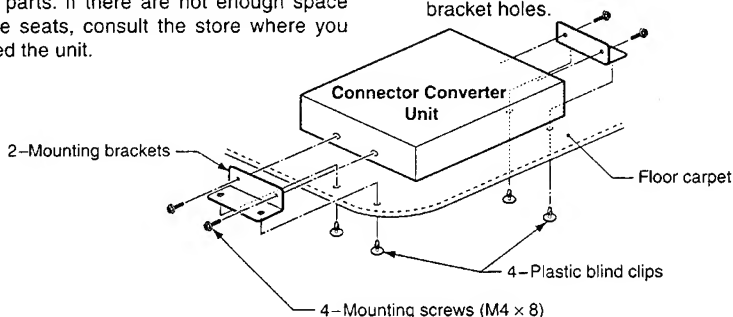


Figure 2

4. CAUTIONS ON WIRING

1. Be sure to turn the power off before wiring.
2. Be particularly careful where you route the wires.

Keep them well away from the engine, and exhaust pipe, etc. Heat may damage the wires.

3. If the fuse should blow, check to see if the wiring is correct.

If it is, replace the fuse with a new one with the same amperage rating as the original.

4. To replace the fuse, release the catch on the source unit side, remove the old fuse and insert the new one. (Figure 3)

Note: There are various types of fuse holder. Do not let the battery side and touch other metal parts.

5. When connecting the ground lead, fasten the ground lead (black) securely to a clean metal plate on the car. (Figure 4)

If the set is insufficiently grounded, it may not operate or there may be noise.

Example 1: Accessory power cord (Red)

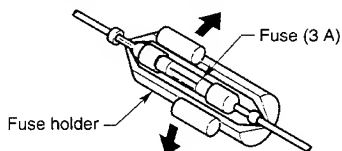


Figure 3

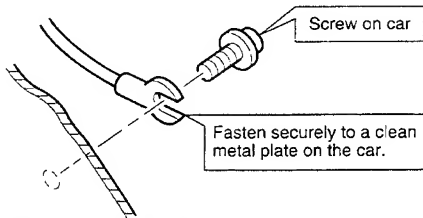
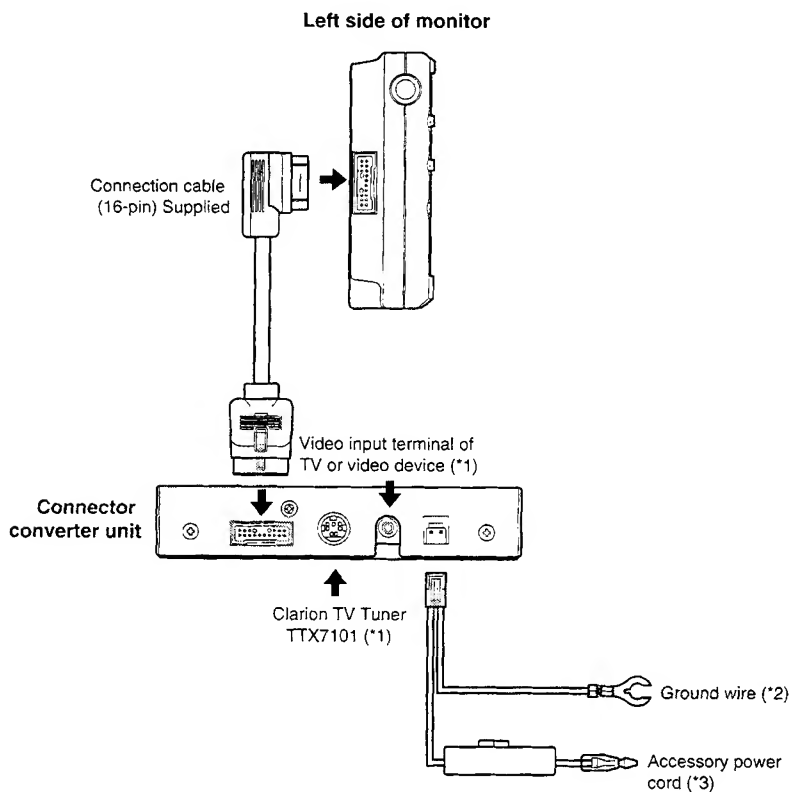


Figure 4

After the connection, fix the lead by a clamp or insulation tape for protection.

5. WIRE CONNECTIONS

The LCD monitor cannot be used by itself. It should be connected to a device such as the Clarion TTX7101 TV tuner or a video deck.



Notes:

The LCD monitor displays video images only. It does not provide audio output. Refer to the instruction manual of the connected device for information on audio output.

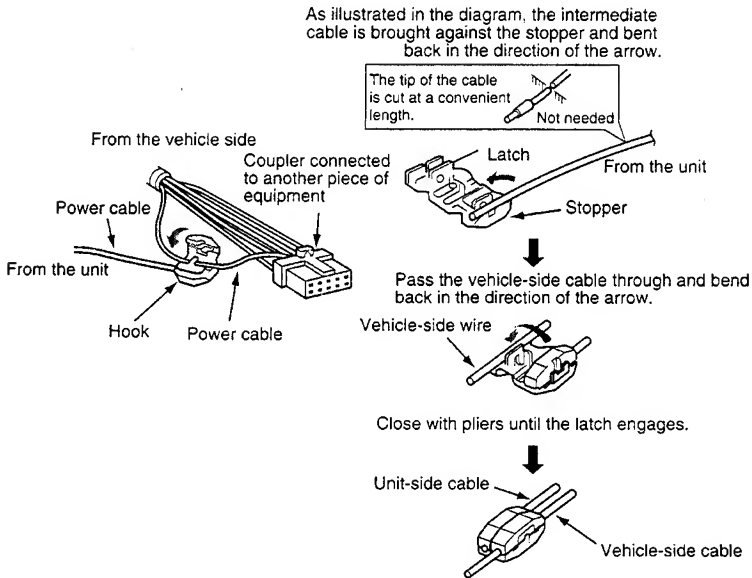
*1. When making connections to a video deck, if the Clarion TTX7101 TV tuner is connected to the LCD monitor, do not use the video input terminal of the connector converter unit under any circumstances. Doing so could cause permanent damage. Instead, use the video input terminal of the TTX7101.

*2. Connect this securely to a metal portion of the chassis using a screw or the like.

*3. Connect this to a power supply terminal that can be turned on and off using the ignition key.

■ Accessory power cord connection example

If it is not possible to connect the accessory power cord to a terminal, make connections using the supplied hook as shown in the diagram.



6. GENERAL CAUTIONS

1. Do not open the case. There are no user serviceable parts inside. If you drop anything into the unit during installation, consult your dealer or an authorized CLARION service center.
2. Use a soft, dry cloth to clean the case. Never use a rough cloth, thinner, benzene, or alcohol, etc. For tough dirt, apply a little cold or warm water to a soft cloth and wipe off the dirt gently.